

Page 1, line 5, start a new paragraph at "The invention in particular" and a new heading as follows:

--2. Description of the Related Art--.

Page 2, before line 19, insert the following headings and paragraphs:

--SUMMARY OF THE INVENTION

a²
The present invention is directed to the identification of and isolation of nucleic acids corresponding to the PLAG and CTNNB1 genes, translocation fusions thereof and derivatives thereof, including transcripts, cDNAs, sense and antisense nucleic acids, proteins derived from the genes, antibodies and fragments thereof which are directed to proteins corresponding to the genes and T-genes and derivatives thereof which are identified through use of the nucleic acids or derivative nucleic acids as a probe or primer.

The present invention is further directed to methods for diagnosing abnormal expression of the PLAG and CTNNB1 genes, for inhibiting expression of these genes and for identifying homologous genes.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a physical contig and STS marker map in proximal human 8q12;

Fig. 2 is a physical contig and STS marker map in distal human 8q12;

Fig. 3A is a contig of 3 overlapping YACs (bold lines), 27 cosmids and 2 phages, containing 27 landmarks and spanning a 300 kb DNA region on chromosome 8q12;

Fig. 3B shows mapping of the 8q12 translocation breakpoint in an adenoma (CG644) with a t(3;8)(p21;q12);

Fig. 4A shows the cDNA and deduced amino acid sequence of PLAG1;

Fig. 4B shows the alignment of the seven zinc-finger-like motifs found in the deduced amino acid sequence of PLAG1 relative to the C2H2 consensus motif;

Fig. 5 shows an illustrative example of the detection of DNA rearrangement in PLAG1 of a primary pleomorphic adenoma using Southern blot analysis;

Fig. 6A shows the detection of CTNNB1/PLAG1 and PLAG1/CTNNB1 fusion transcripts by RT-PCR in primary adenomas;

Fig. 6B shows a schematic representation of the nature and origin of CTNNB1/PLAG1 and PLAG1/CTNNB1 fusion transcripts in primary pleomorphic adenomas with t(3;8)(p21;q12);

Fig. 7A shows a Northern blot analysis of the expression pattern of PLAG1 in normal human fetal tissues;

Fig. 7B shows a Northern blot analysis of the expression pattern of the CTNNB1 gene in normal human fetal and adult tissues;

Fig. 7C shows detection of CTNNB1/PLAG1 transcripts in pleomorphic adenomas by Northern blot analysis using exon 1 of CTNNB1 as a molecular probe;